

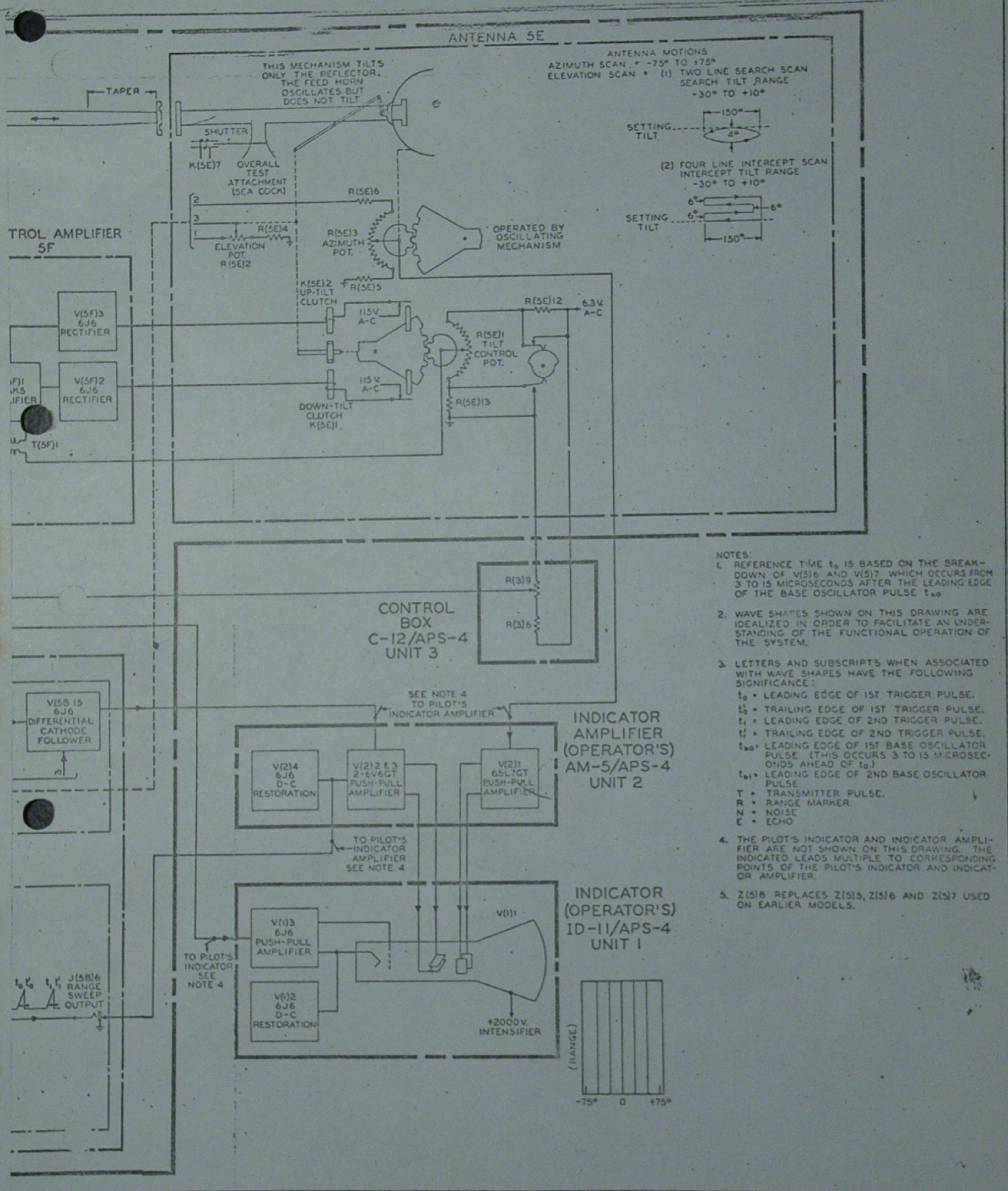
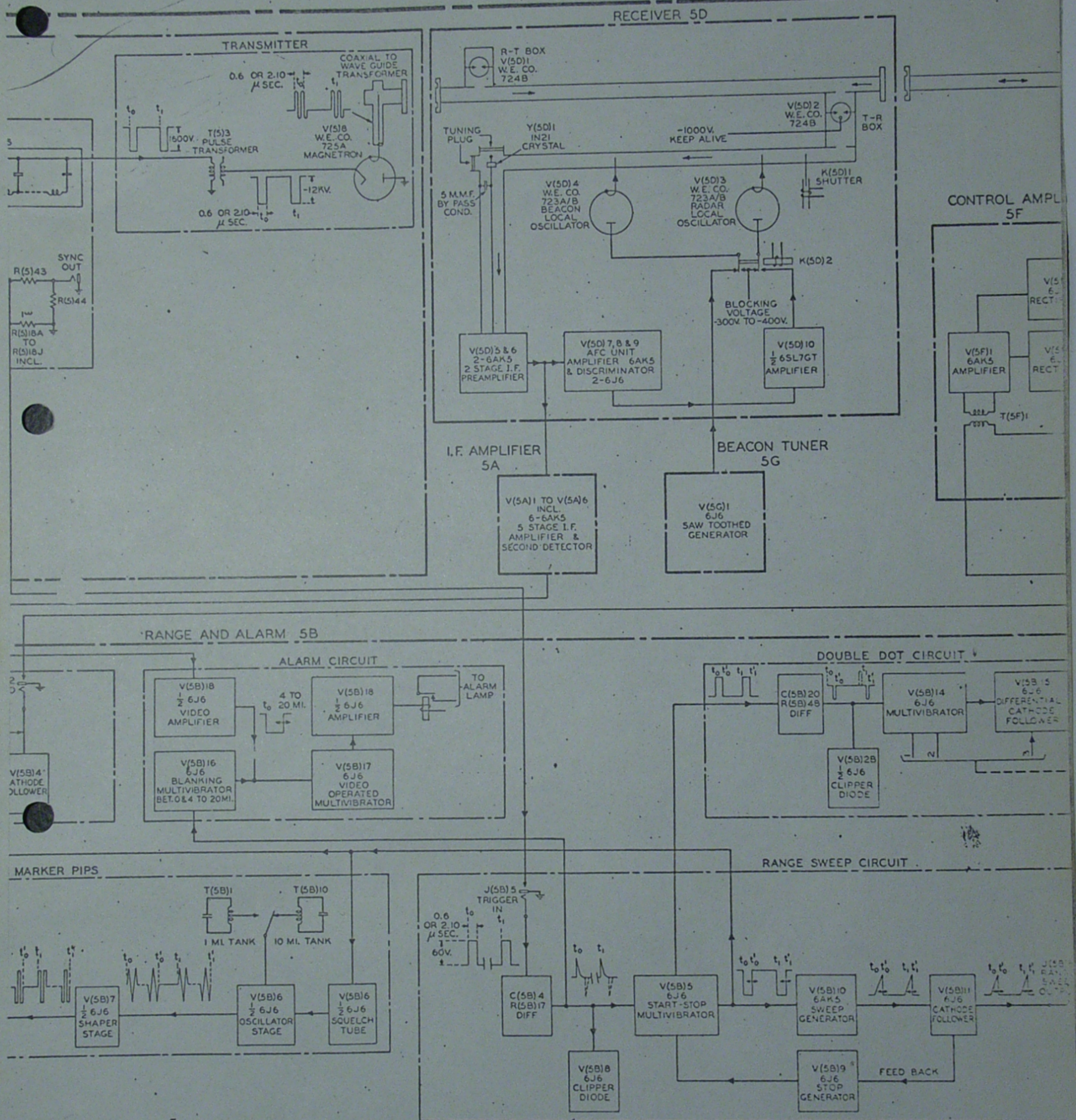
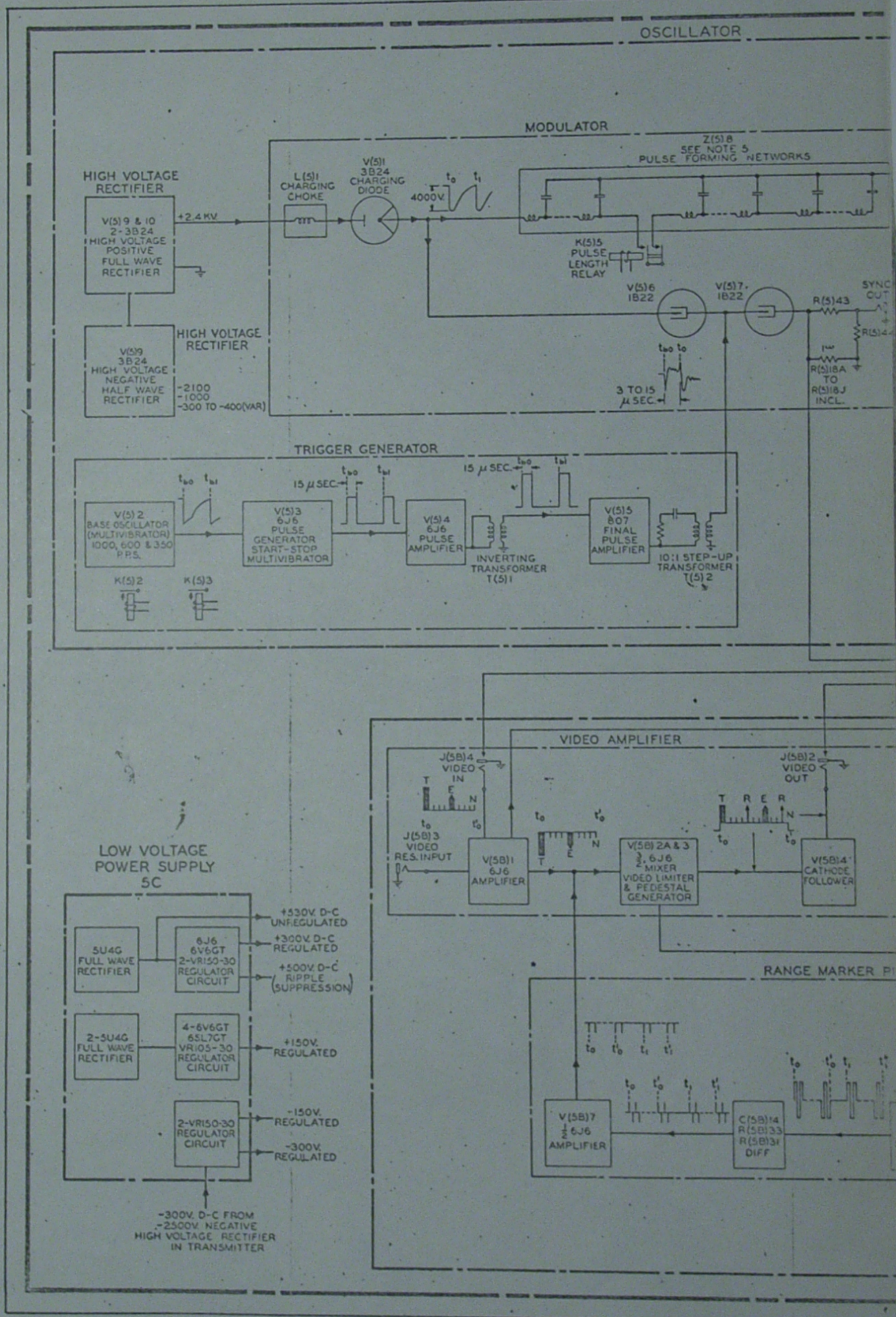


Figure 149—Radar Equipment AN/APS-4; Functional Diagram

Fig. 149





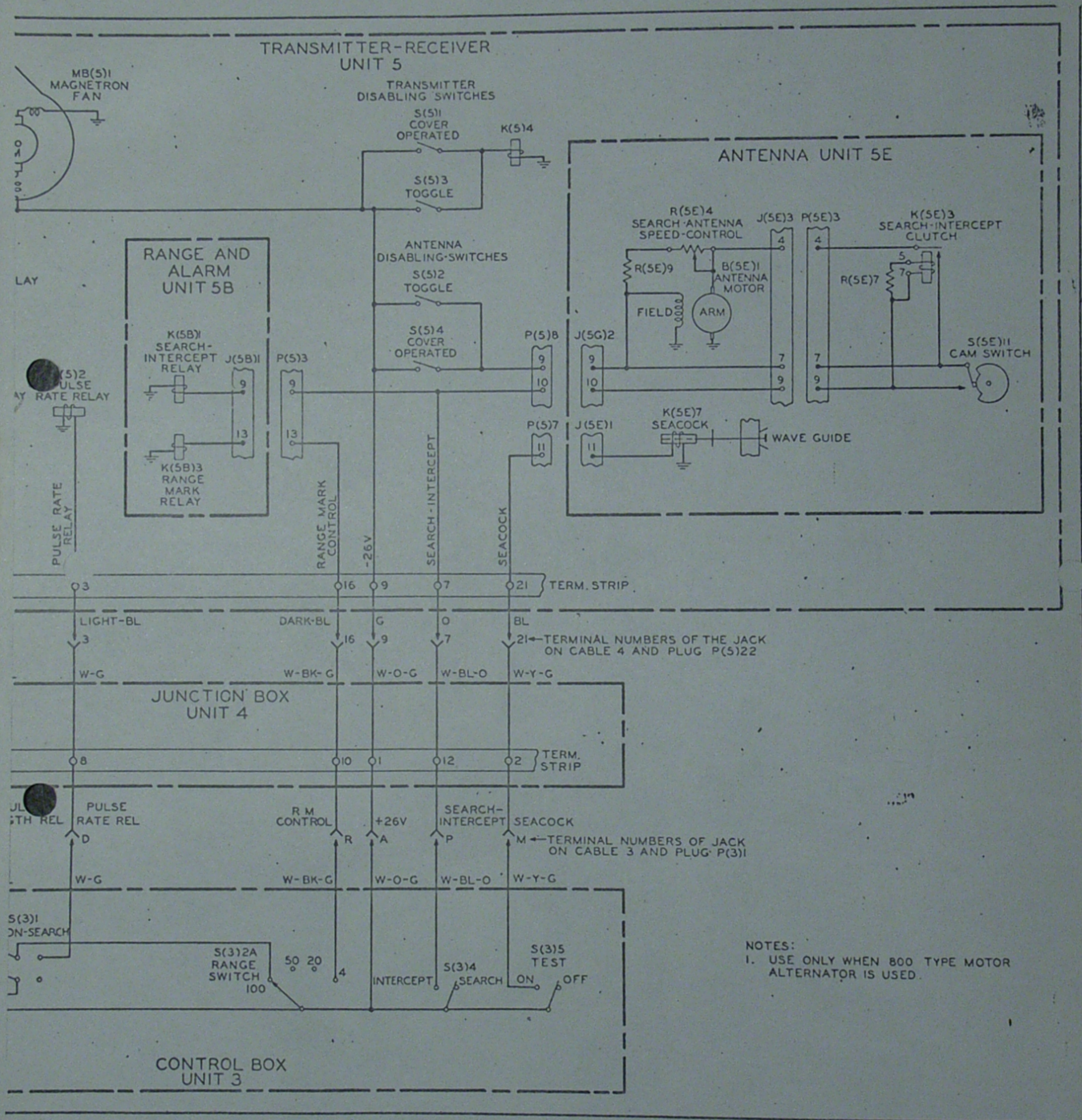


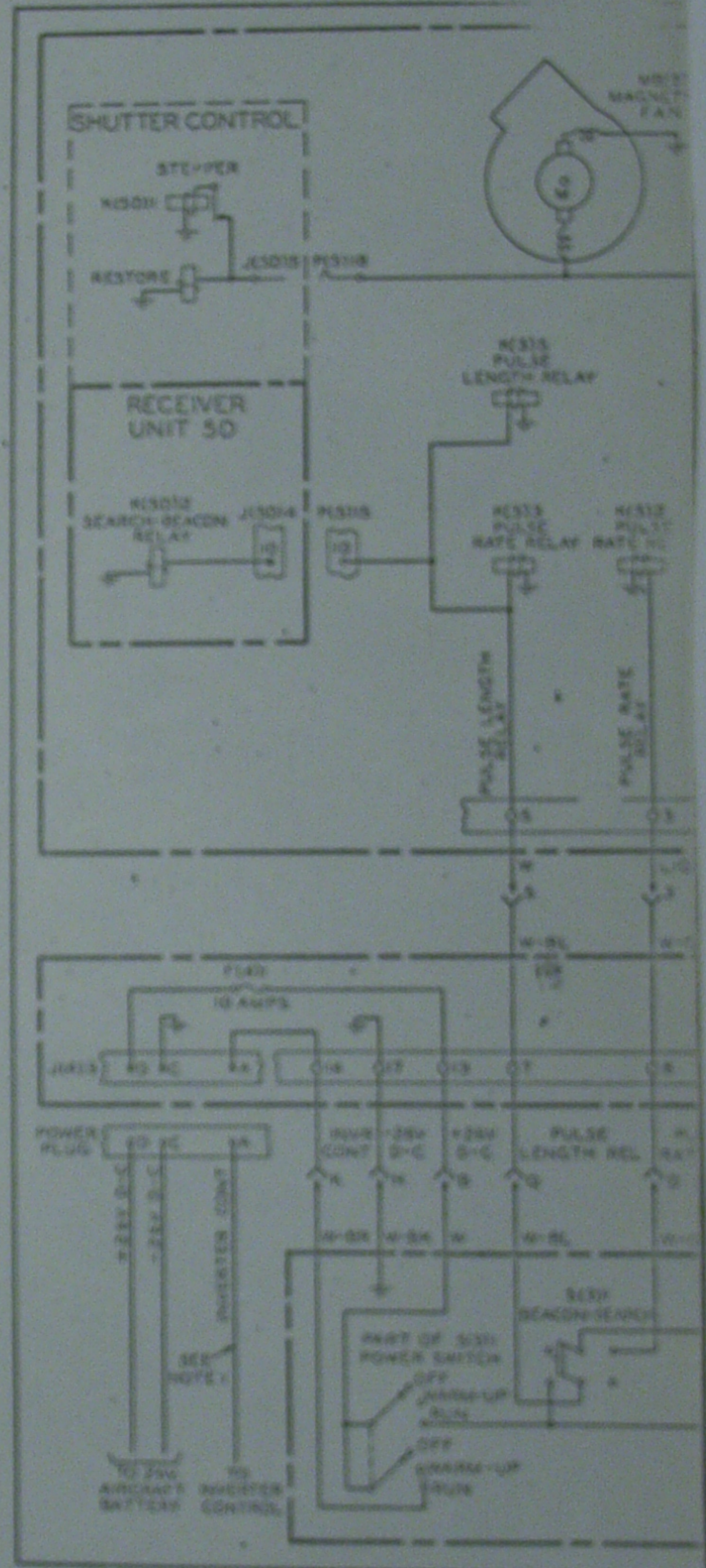
Figure 152—Radar Equipment AN/APS-4;
26-Volt D-C Power Supply Schematic Diagram

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Fig. 152

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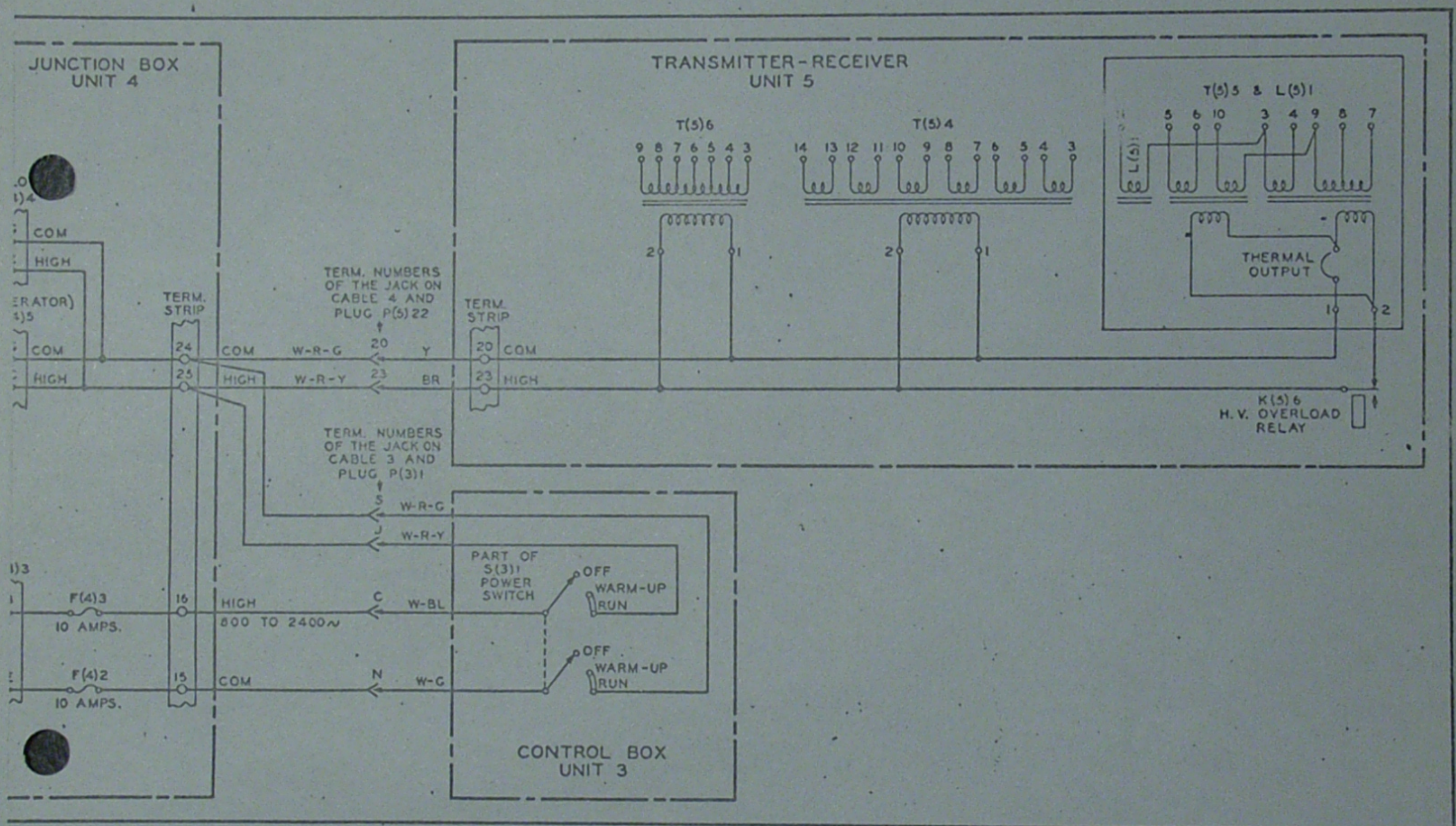


Figure 153—Radar Equipment AN/APS-4;
115-Volt A-C Power Supply Schematic Diagram

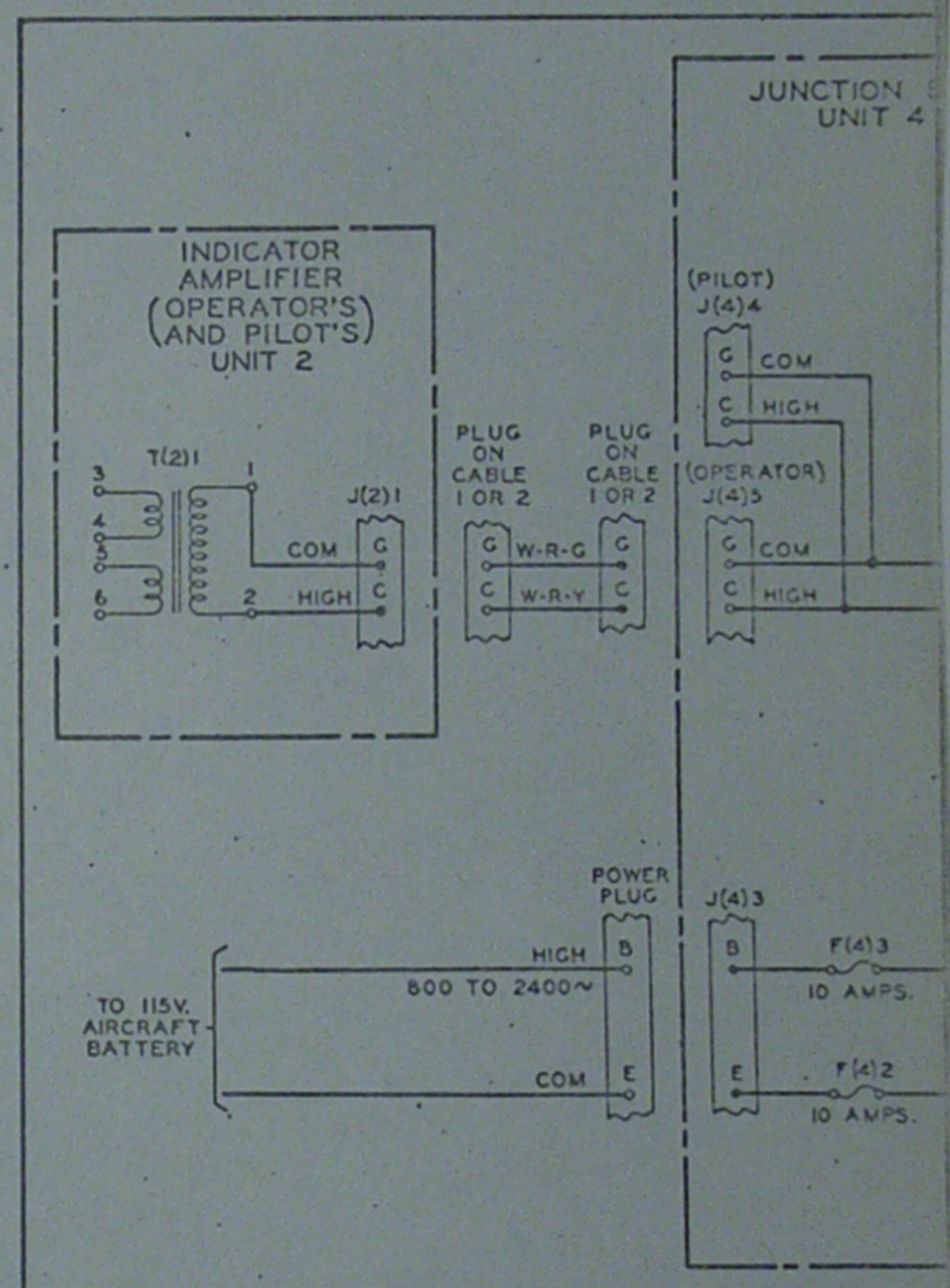
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Fig. 153

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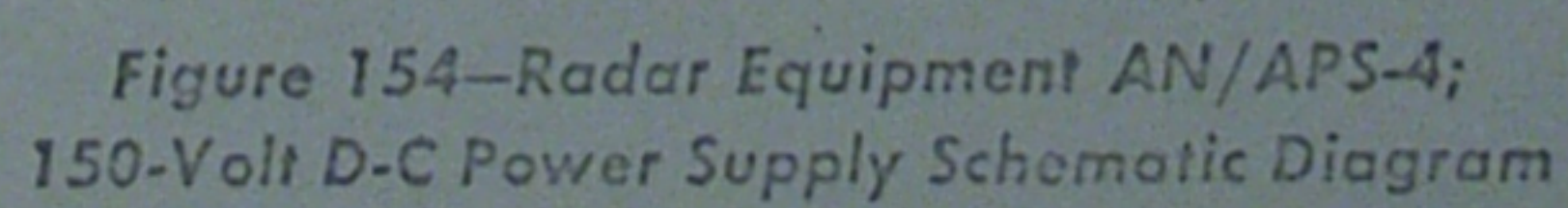
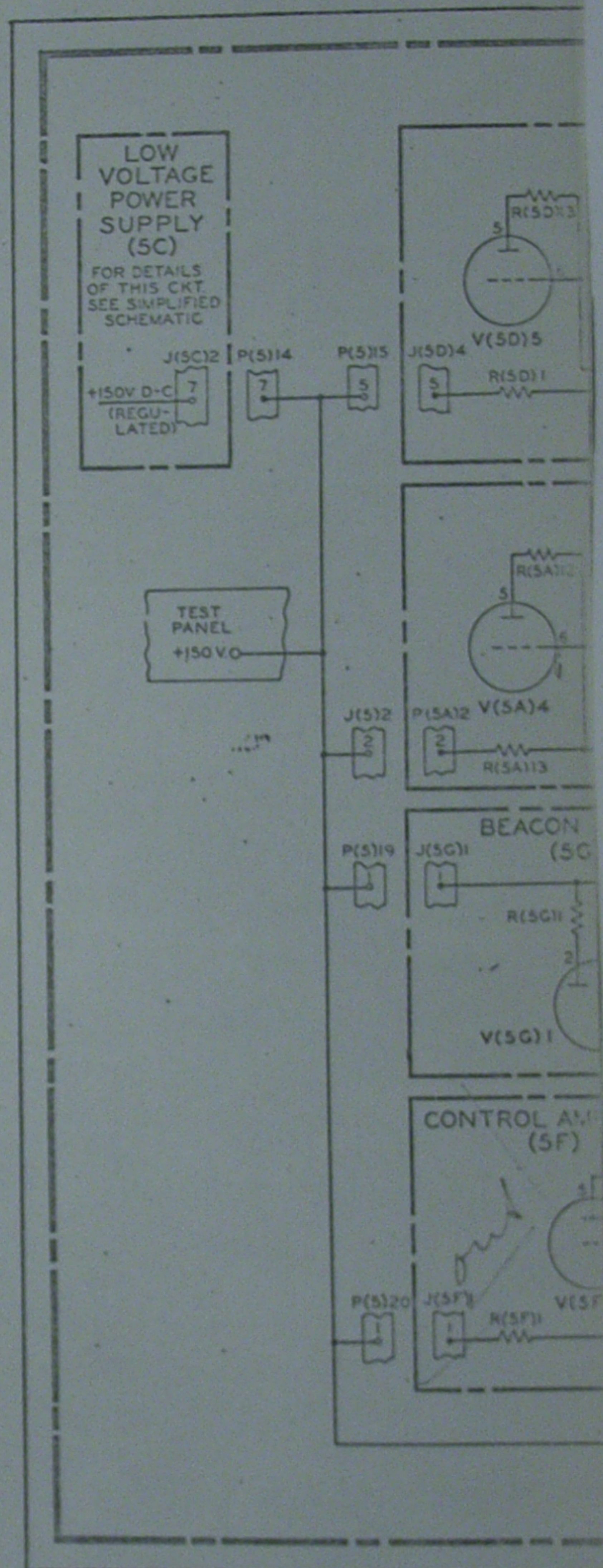


Fig. 154

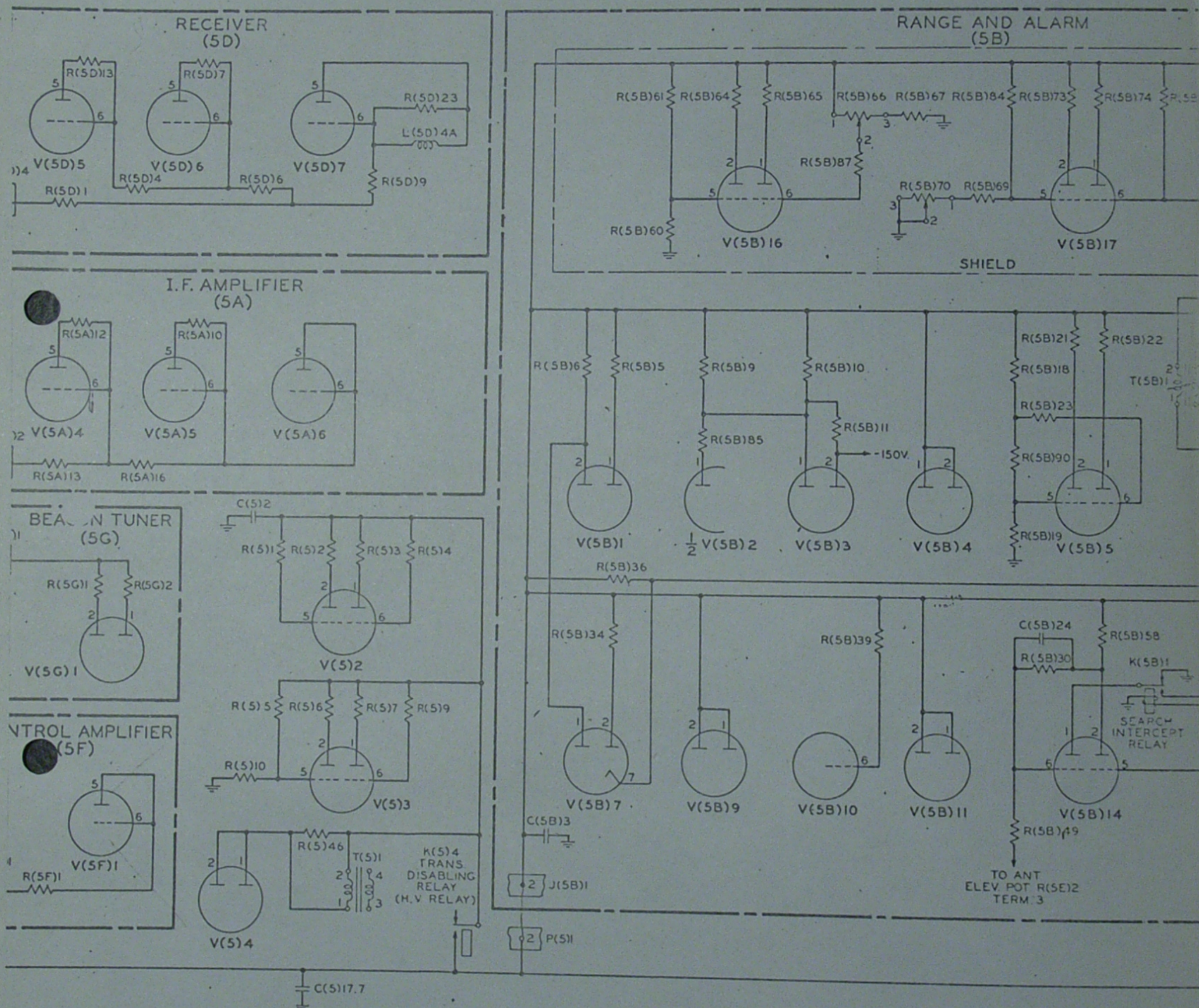
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TRANSMITTER-RECEIVER
UNIT 5



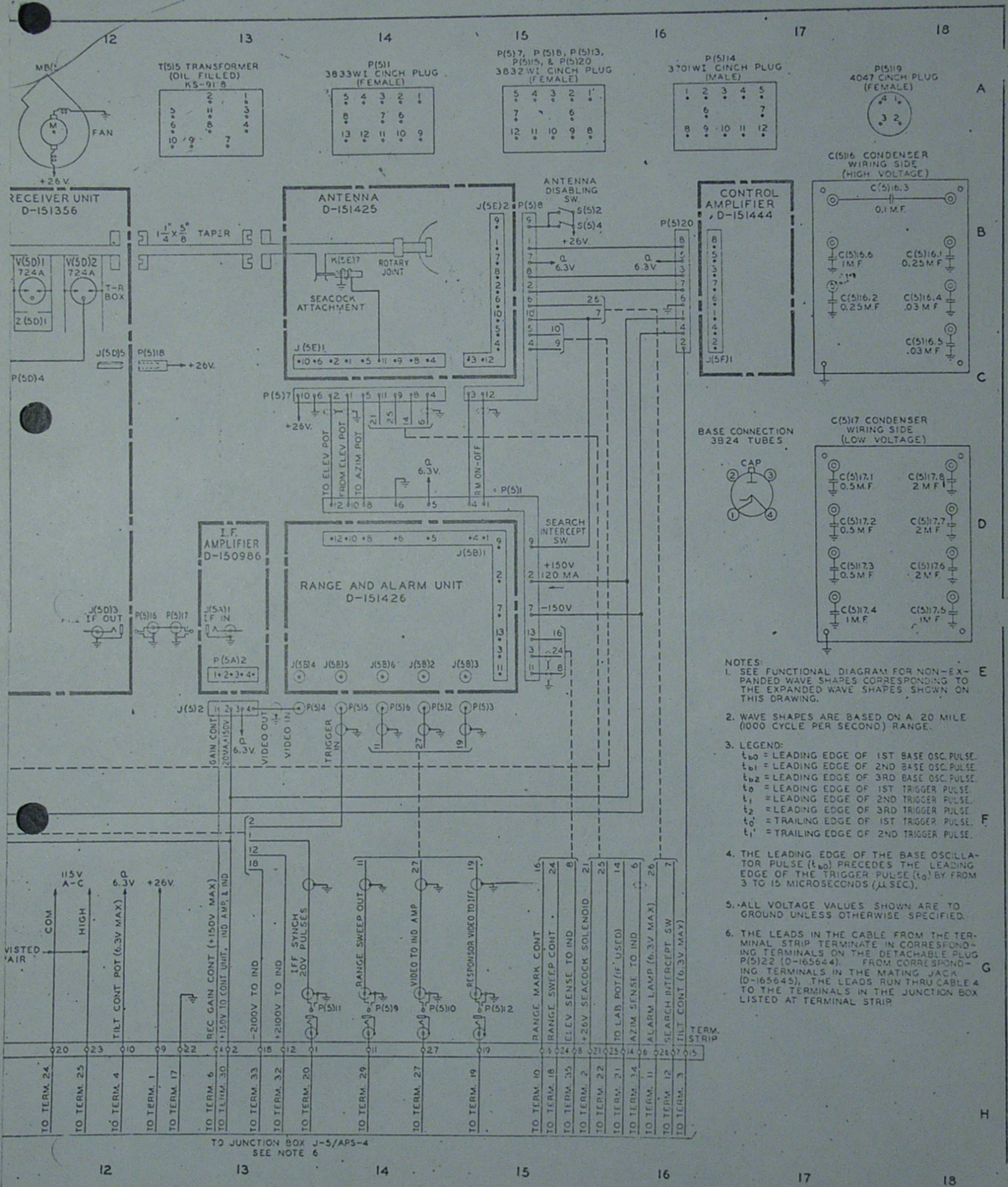
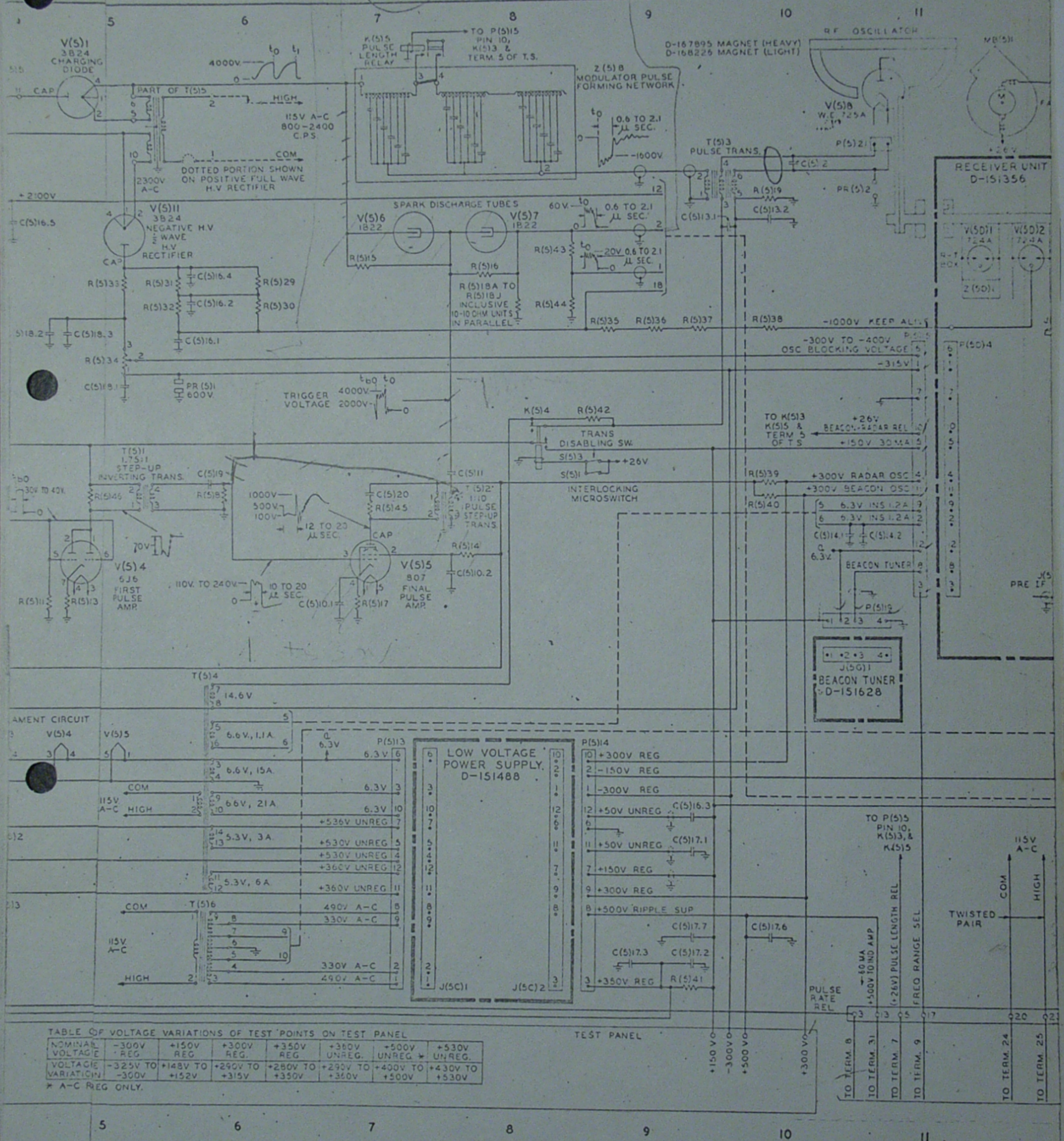


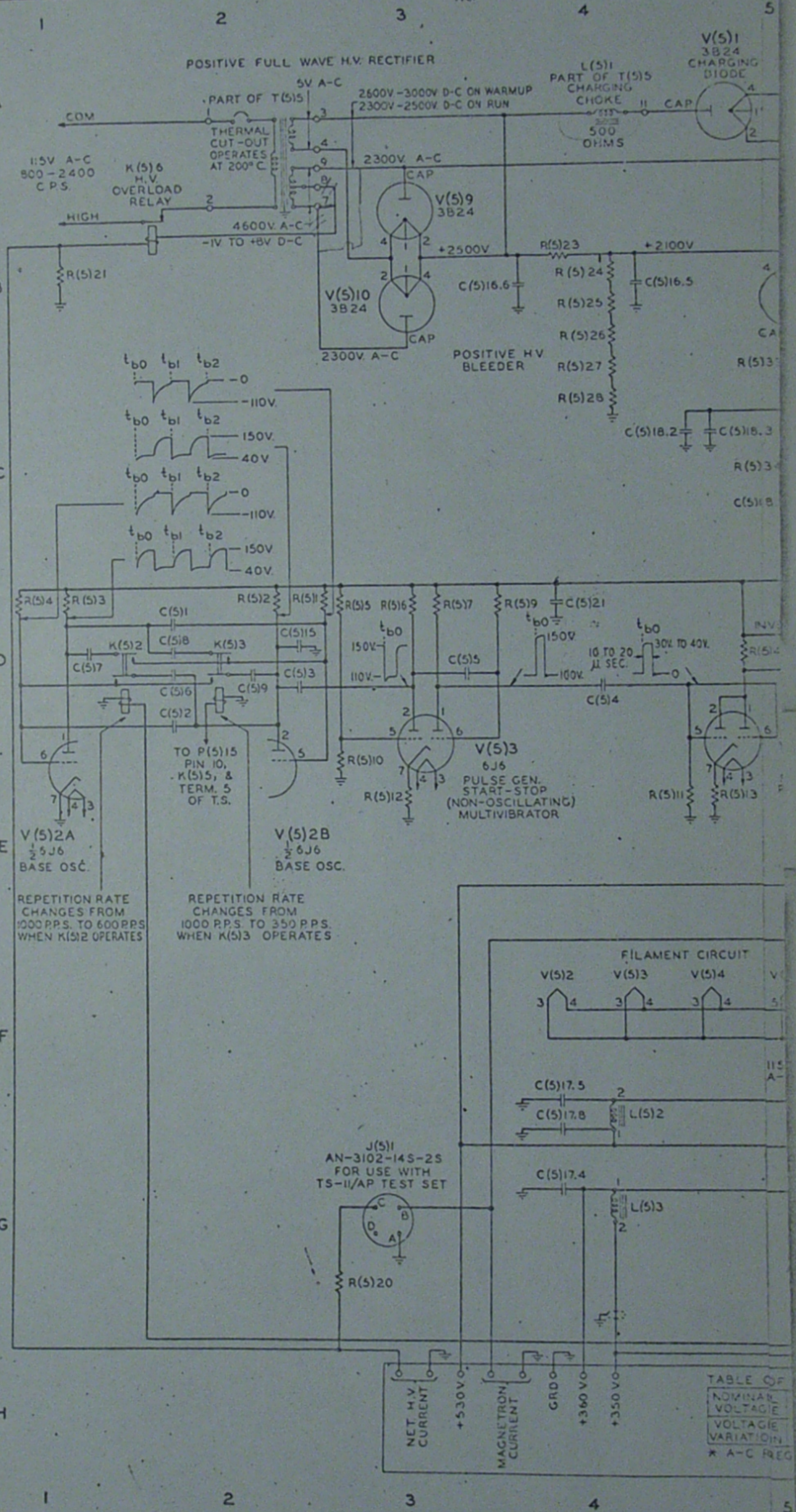
Figure 159—Transmitter-Receiver RT-5/APS-4; Schematic Diagram

Fig. 159



CIRCUIT ELEMENT VALUES AND LOCATION CHART

ITEM	RESISTANCE OR CAPACITY VALUE	TOLERANCE	LOCATION	CIRCUIT ELEMENT REF. NO.	RESISTANCE OR CAPACITY VALUE	TOLERANCE	LOCATION
C(5)1	.0047 M.F.	±2%	2-D	R(5)1	215,000 OHMS	±1%	2-D
C(5)2	.0047 M.F.	±2%	2-D	R(5)2	22,000 OHMS	±10%	2-D
C(5)3	.0047 M.F.	±2%	2-D	R(5)3	22,000 OHMS	±10%	1-D
C(5)4	.0047 M.F.	±2%	2-D	R(5)4	215,000 OHMS	±1%	1-D
C(5)5	.0001 M.F.	±5%	3-D	R(5)5	0.33 MEG	±5%	3-D
C(5)6	.0033 M.F.	±2%	2-D	R(5)6	6800 OHMS	±10%	3-D
C(5)7	.0033 M.F.	±2%	1-D	R(5)7	6800 OHMS	±10%	3-D
C(5)8	.0091 M.F.	±2%	2-D	R(5)8	0.1 MEG	±20%	6-D
C(5)9	.0091 M.F.	±2%	2-D	R(5)9	1.8 MEG	±5%	4-D
C(5)10	.05 M.F.	±15%	7-E	R(5)10	55,000 OHMS	±5%	3-E
C(5)11	.05 M.F.	±15%	8-F	R(5)11	1.2 MEG	±20%	4-E
C(5)12	.05 M.F.	±15%	8-F	R(5)12	4.700 OHMS	±5%	3-E
C(5)13	.01 M.F.	±20%	10-B	R(5)13	100 OHMS	±20%	5-E
C(5)13.1	.01 M.F.	±15%	9-B	R(5)14	10,000 OHMS	±20%	8-E
C(5)13.2	.01 M.F.	±15%	10-B	R(5)15	3 MEG	±5%	7-B
C(5)14.1	.01 M.F.	±15%	10-D	R(5)16	3 MEG	±5%	8-B
C(5)14.2	.01 M.F.	±15%	11-D	R(5)17	12,000 OHMS	±20%	7-E
C(5)15	.50 M.F.	±20%	2-D	R(5)18	10,000 OHMS	±20%	8-C
C(5)16	.025 M.F.	±20%	5-C	R(5)19	100 OHMS	±5%	10-B
C(5)16.2	.025 M.F.	±20%	5-C	R(5)20	47 OHMS	±10%	3-G
C(5)16.3	.01 M.F.	±20%	9-F	R(5)21	51 OHMS	±10%	1-B
C(5)16.4	.03 M.F.	±20%	8-B	R(5)23	0.47 MEG	±20%	4-B
C(5)16.5	.03 M.F.	±20%	4-B	R(5)24	0.47 MEG	±20%	4-B
C(5)16.6	.03 M.F.	±20%	4-B	R(5)25	0.47 MEG	±20%	4-B
C(5)17	.01 M.F.	±20%	18-D	R(5)26	0.47 MEG	±20%	4-B
C(5)17.1	.05 M.F.	±20%	9-F	R(5)27	0.47 MEG	±20%	4-C
C(5)17.2	.05 M.F.	±20%	9-G	R(5)28	0.47 MEG	±20%	4-C
C(5)17.3	.05 M.F.	±20%	9-G	R(5)29	0.1 MEG	±20%	8-E
C(5)17.4	.01 M.F.	±20%	4-G	R(5)30	0.1 MEG	±20%	6-C
C(5)17.5	.01 M.F.	±20%	4-F	R(5)31	0.1 MEG	±20%	5-C
C(5)17.6	.01 M.F.	±20%	10-G	R(5)32	0.1 MEG	±20%	5-C
C(5)17.7	.01 M.F.	±20%	9-G	R(5)33	0.17 MEG	±10%	5-C
C(5)17.8	.01 M.F.	±20%	4-F	R(5)34	10,000 OHMS	±10%	5-C
C(5)18.1	.01 M.F.	±10%	5-C	R(5)35	3.9 MEG	±20%	9-C
C(5)18.2	.01 M.F.	±10%	5-C	R(5)36	3.9 MEG	±20%	9-C
C(5)18.3	.01 M.F.	±10%	5-C	R(5)37	3.9 MEG	±20%	9-C
C(5)19	.003 M.F.	±20%	5-D	R(5)38	3.9 MEG	±20%	10-
C(5)20	.003 M.F.	±20%	7-D	R(5)39	5000 OHMS	±10%	10-
C(5)21	.500 M.F.	±5 M.F.	4-D	R(5)40	5000 OHMS	±10%	10-
J(5)1			3-G	R(5)41	2500 OHMS	±10%	9-
J(5)2			13-E	R(5)42	10.5 OHMS	±10%	9-
K(5)3	300 OHMS		1-D	R(5)43	68 OHMS	±20%	8-
K(5)4	300 OHMS		2-D	R(5)44	33 OHMS	±20%	8-
K(5)5	190 OHMS		7-A	R(5)45	1500 OHMS	±20%	7-
K(5)6	90 OHMS		2-B	R(5)46	10,000 OHMS	±20%	5-
L(5)1			4-A	S(5)1			9-D
L(5)2	113 OHMS		4-F	S(5)2			15-D
L(5)3	57 OHMS		4-G	S(5)3			9-D
L(5)4				S(5)4			15-D
MB(5)1			12-A	T(5)1			5-D
P(5)1			15-D	T(5)2			8-D
P(5)2			14-E	T(5)3			10-B
P(5)3			15-E	T(5)4			6-E
P(5)4			13-E	T(5)5			2-2.5-A
P(5)5			14-E	T(5)6			6-G
P(5)6			14-E	V(5)1			5-A
P(5)7			14-C	V(5)2			1-E, 2-E
P(5)8			15-B	V(5)3			3-E
P(5)9			4-G	V(5)4			5-E
P(5)10			14-G	V(5)5			7-E
P(5)11			13-G	V(5)6			7-B
P(5)12			15-G	V(5)7			8-B
P(5)13			7-F	V(5)8			11-A
P(5)14			9-F	V(5)9			3-B
P(5)15			11-B	V(5)10			3-B
P(5)16			2-E	V(5)11			5-B
P(5)17			2-E				
P(5)18			12-C				
P(5)19			11-E				
P(5)20			15-B				
P(5)21			11-B				
PR(5)1			8-C	Z(5)8			8-A
PR(5)2			11-B				



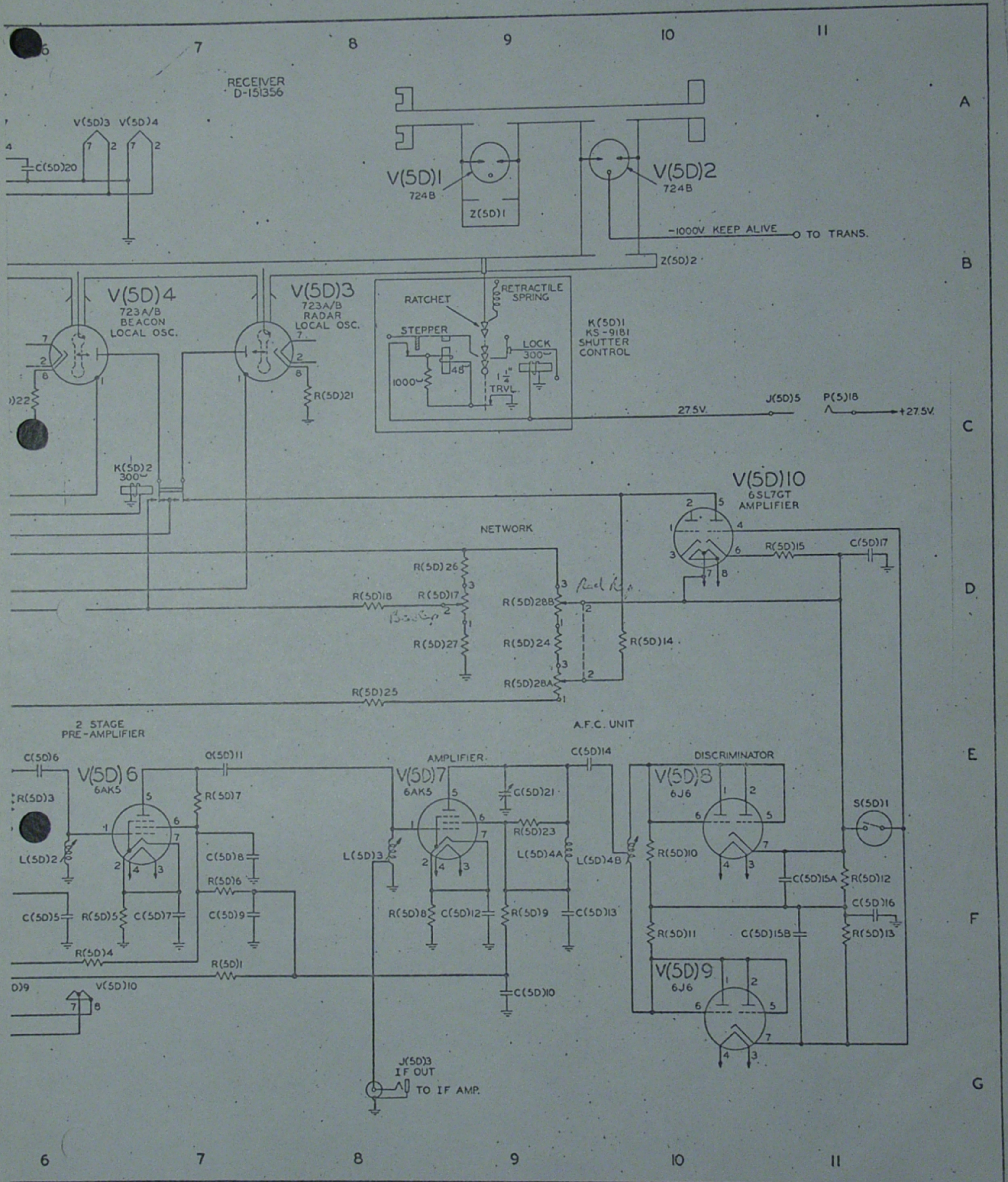


Figure 163—Receiver and Beacon Tuner Schematic Diagram

Fig. 163

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DATE	LOCATION
	11-F
	10-D
	11-D
	9-D
	8-D
	8-C
	6-C
	9-E
	9-D
	8-E
	9-D
	9-D
	9-D
	9-D
	11-E
	9-A
	10-A
	7-B
	6-B
	5-E
	7-E
	9-E
	11-E
	11-G
	10-D
	5-B
	9-B
	10-B
	4-B
	5-B
	11-E
	1-D
	1-D
	2-D
	2-E
	1-D
	2-F
	2-F
	1-F
	1-F

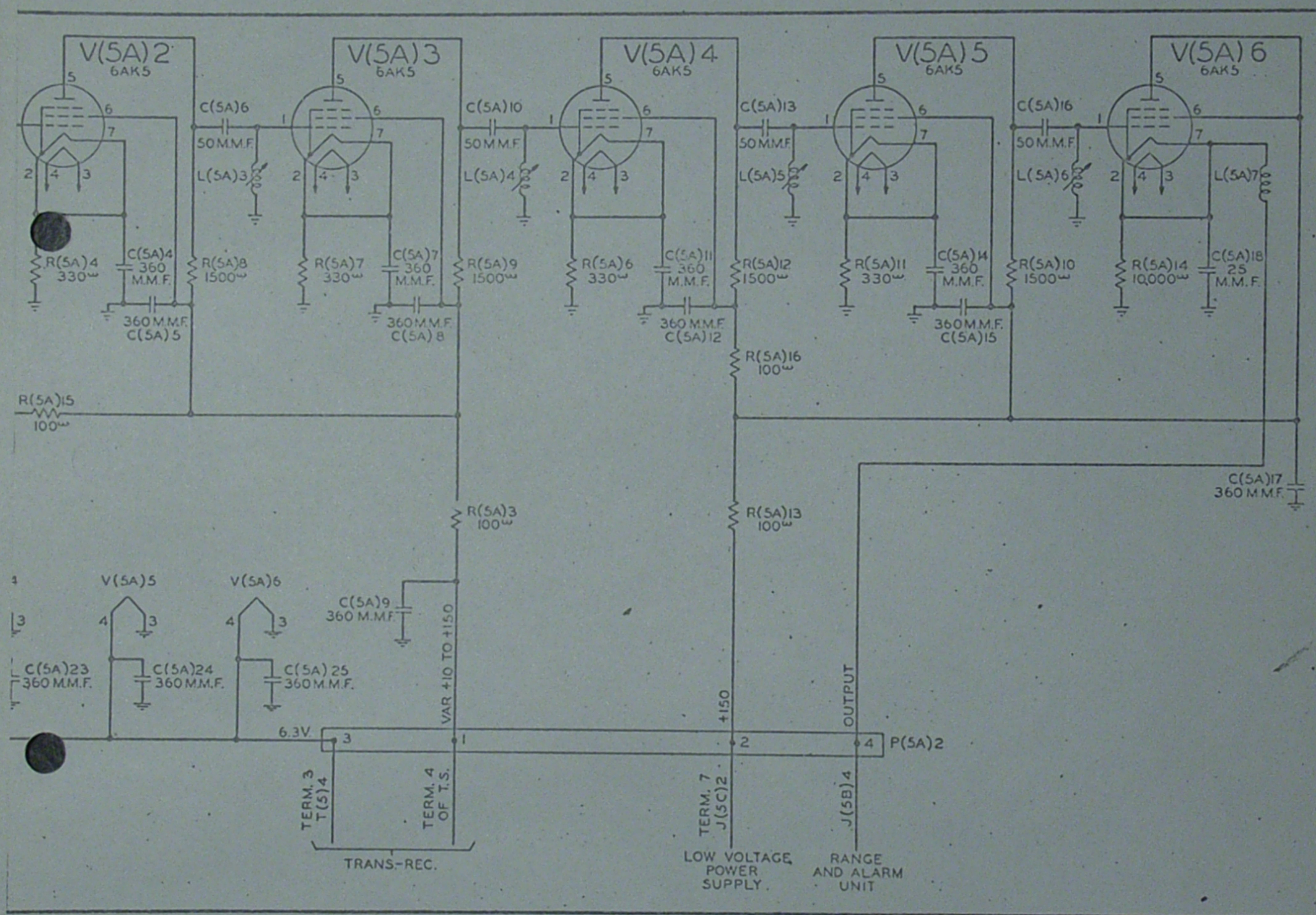


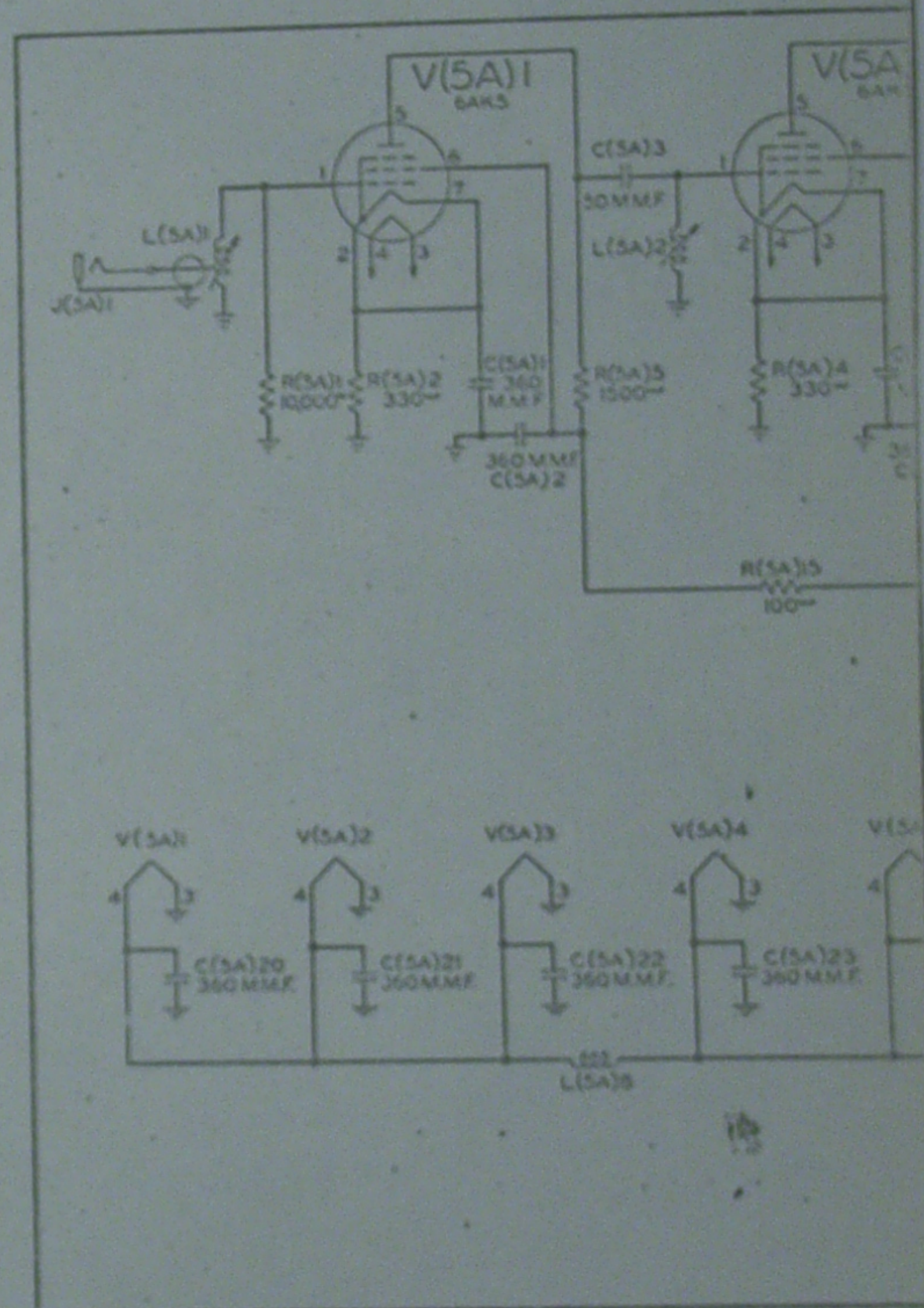
Figure 167—I-F Amplifier Schematic Diagram

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Fig. 167

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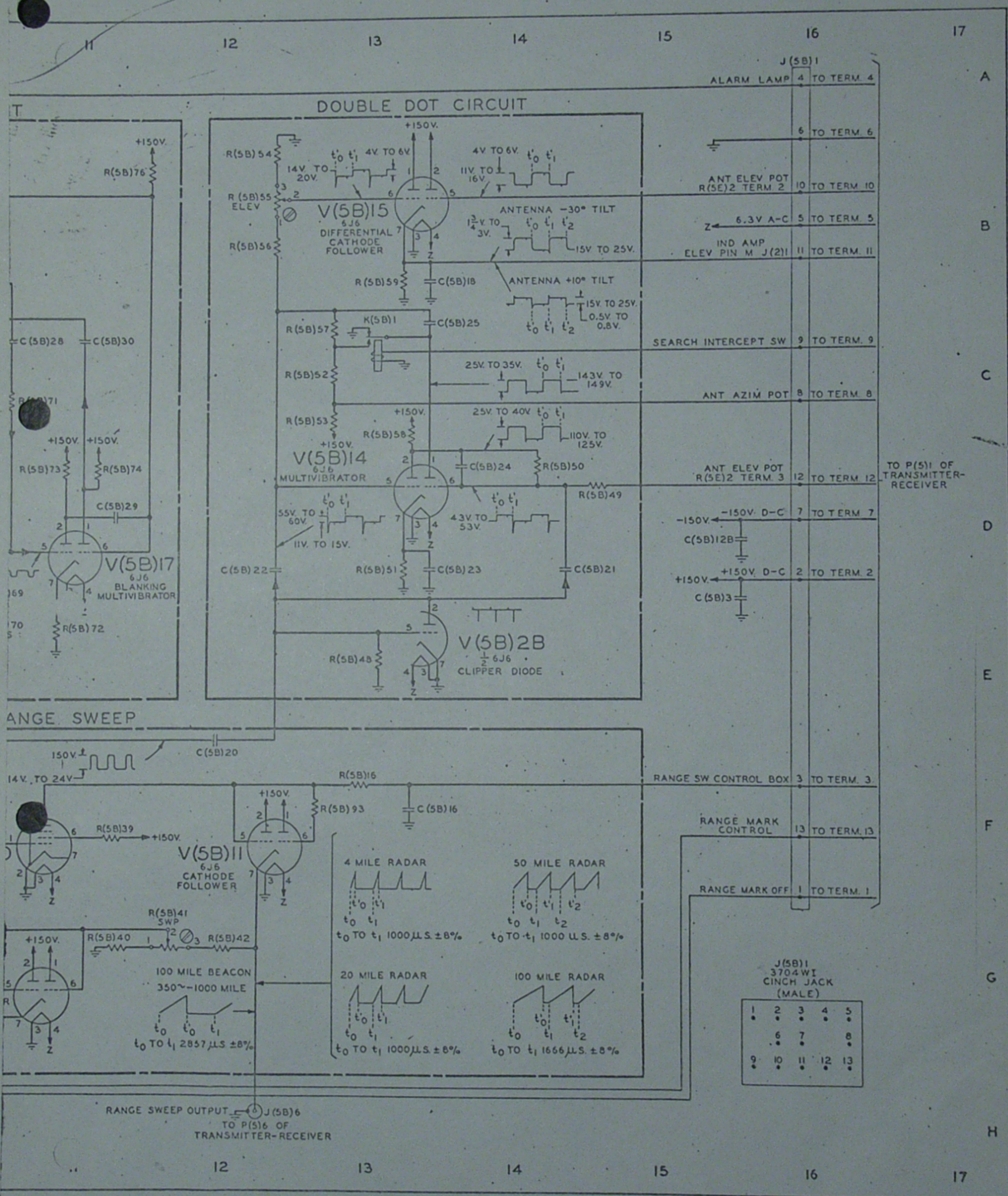


Figure 170—Range and Alarm Unit Schematic Diagram

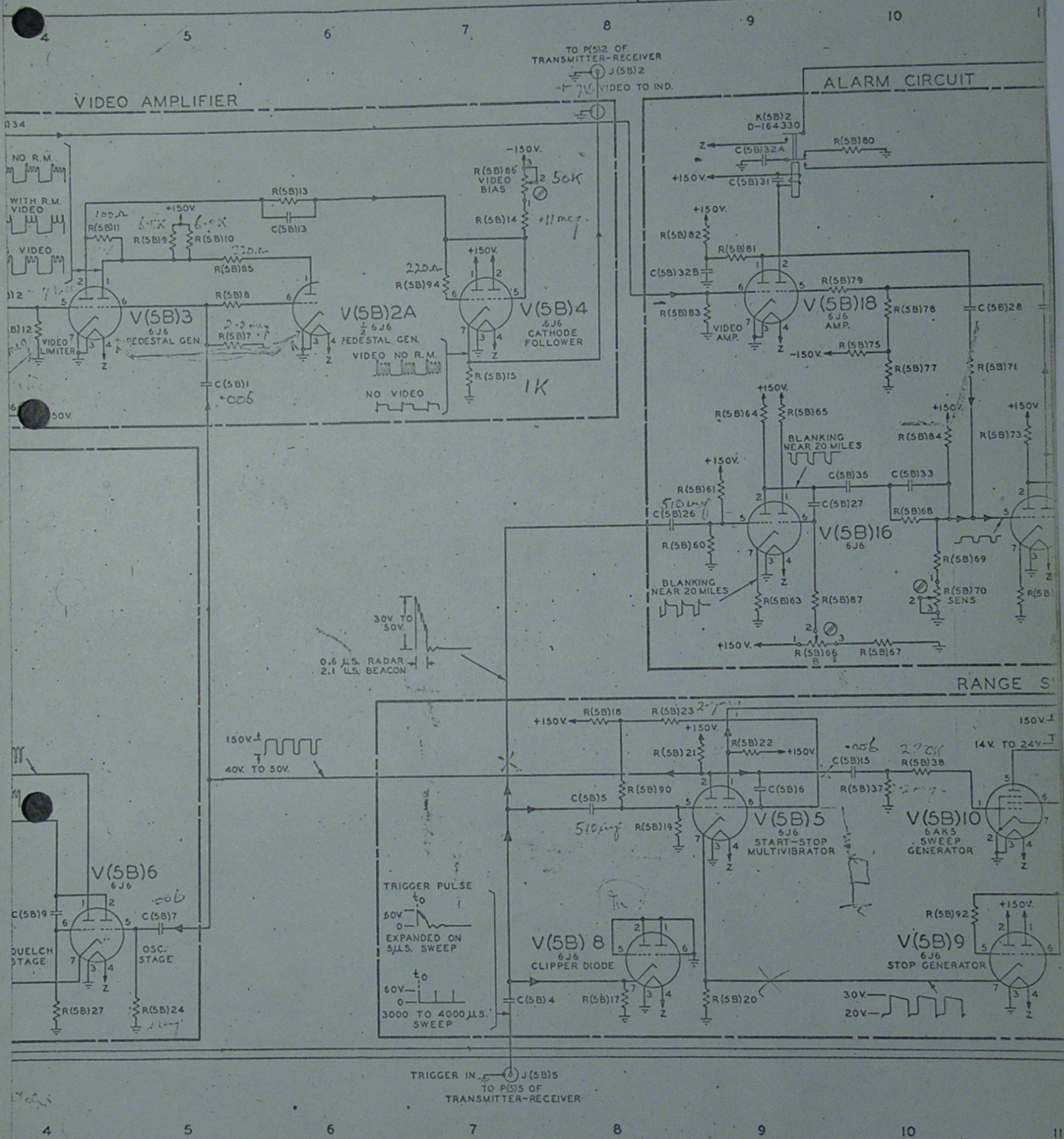
Fig. 170

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The schematic diagram illustrates the receiver section of a radio receiver, organized into several functional blocks and stages:

- Input and Tuning Stages (A, B, C):**
 - TO P(5)3 OF TRANSMITTER-RECEIVER:** A connection point for the receiver's output.
 - TO P(5)4 OF TRANSMITTER-RECEIVER:** A connection point for the receiver's output.
 - RES VIDEO:** A video signal input.
 - I.F. VIDEO:** An intermediate frequency video signal input.
 - V(5B)1 6J6 SHAPER STAGE:** A vacuum tube used for signal shaping.
 - AMP.:** An amplifier stage.
 - R(5B)5, R(5B)1, R(5B)2, R(5B)3, R(5B)91, R(5B)4:** Various resistors used in the input and shaping stages.
 - J(5B)3, J(5B)4:** Jacks for external connections.
 - VIDEO:** A video signal input.
 - VIDEO:** A video signal input.
- Range Marker and Tuning Stages (D, E, F):**
 - RANGE MARKER PIP:** A feature for range marking.
 - +150V.:** A power supply connection.
 - R(5B)88, R(5B)89, C(5B)10:** Components in the range marker stage.
 - T(5B)10:** A tuning stage.
 - R(5B)28, R(5B)30, C(5B)12A, C(5B)37:** Components in the tuning stage.
 - T(5B)11:** A tuning stage.
 - R(5B)26:** A resistor in the tuning stage.
 - K(5B)3:** A component in the tuning stage.
- Output and Amplification Stages (G):**
 - V(5B)7 6J6 AMP.:** A vacuum tube used for amplification.
 - +150V.:** A power supply connection.
 - R(5B)34, R(5B)31, R(5B)33, R(5B)32, R(5B)29, R(5B)36, R(5B)25:** Various resistors in the output and amplification stages.
 - C(5B)11, C(5B)14, C(5B)12, C(5B)8:** Various capacitors in the output and amplification stages.
 - 510-1:** A component in the output stage.
 - 2-2 meg:** A component in the output stage.

UNLESS OTHERWISE SPECIFIED,
LE (1000~) RANGE.

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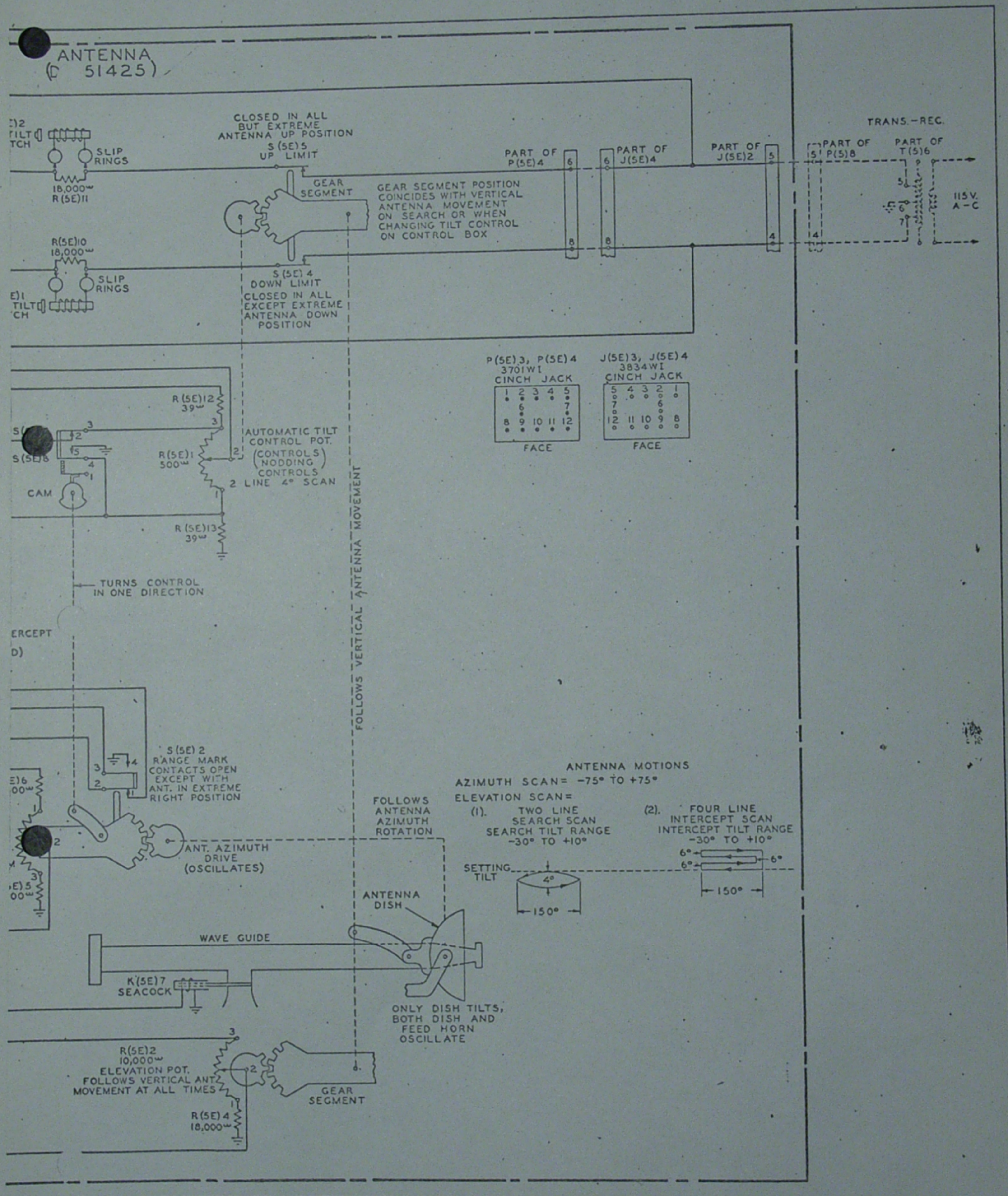


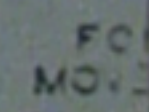
Figure 174—Antenna and Control Amplifier Schematic Diagram

Fig. 174

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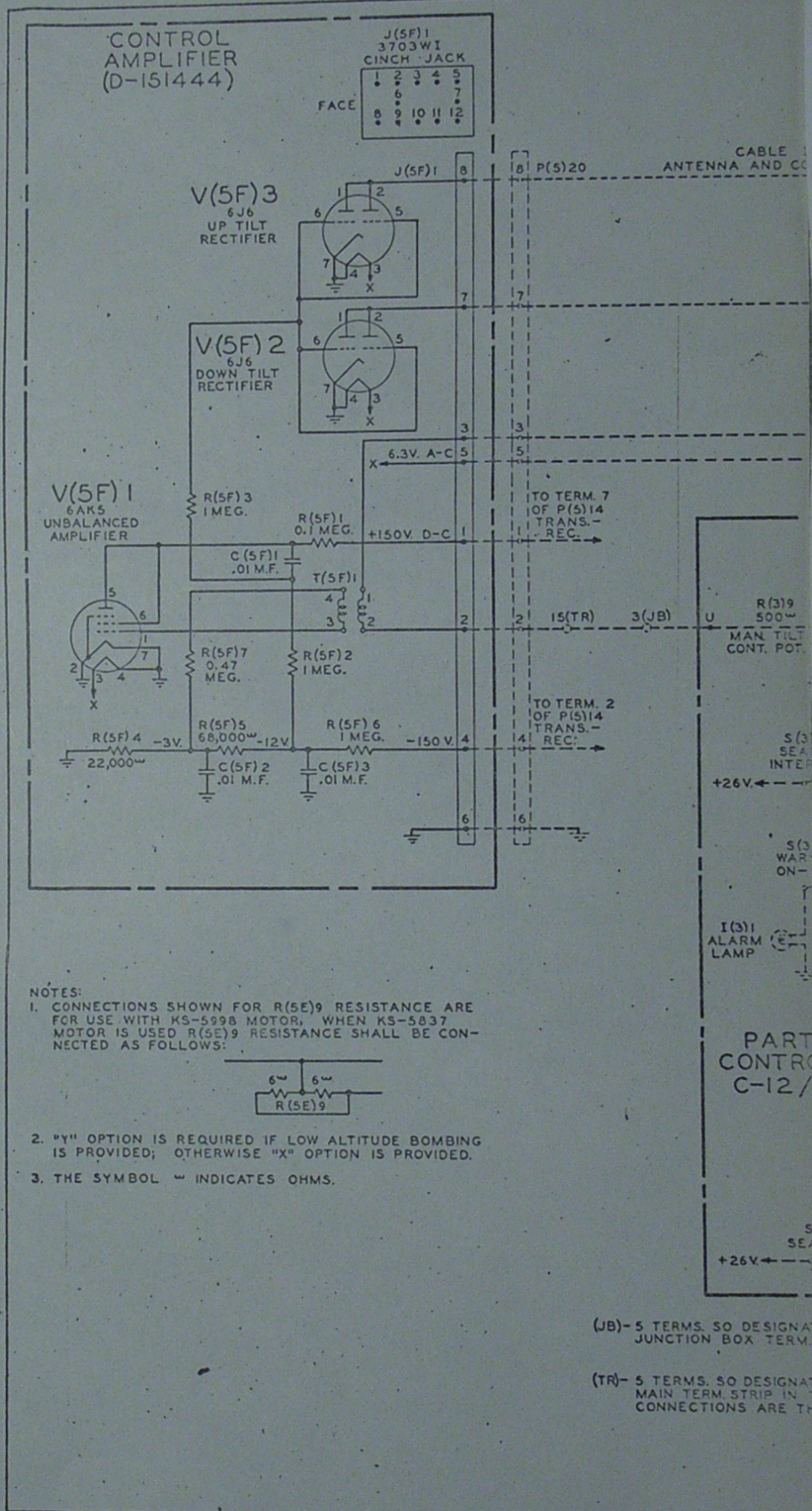
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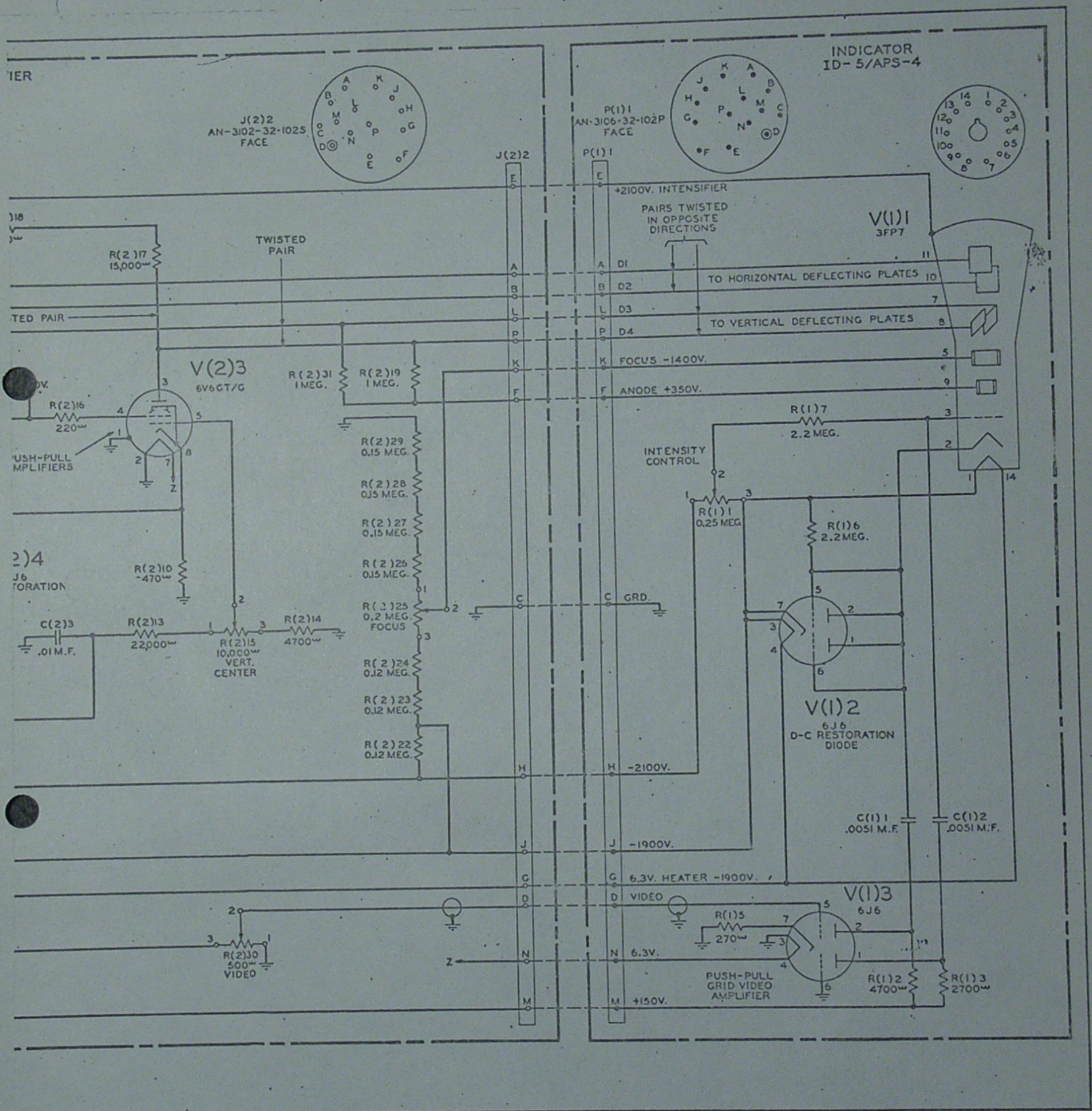
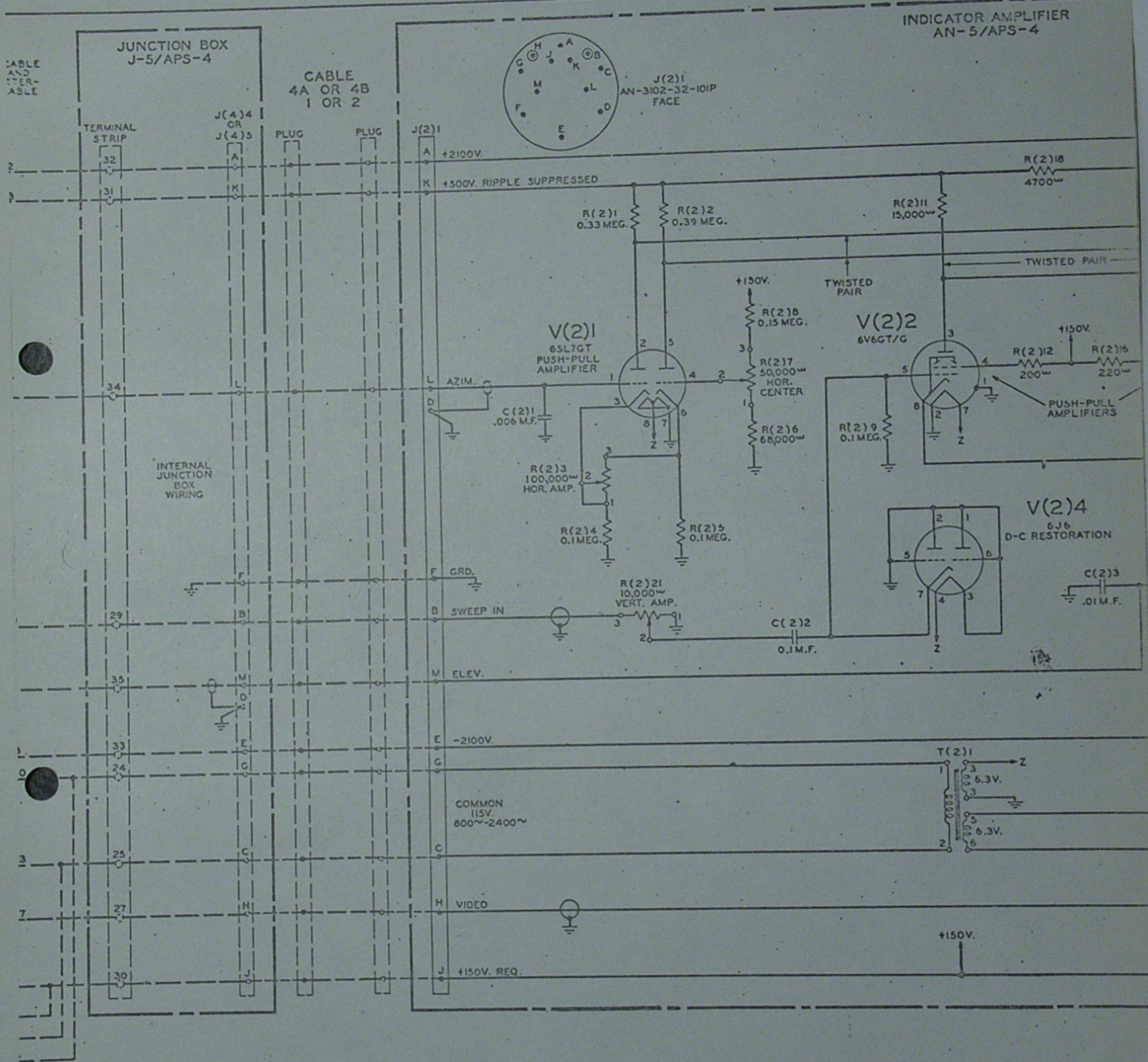


Figure 179—Indicator-Amplifier and Indicator Schematic Diagram

Fig. 179

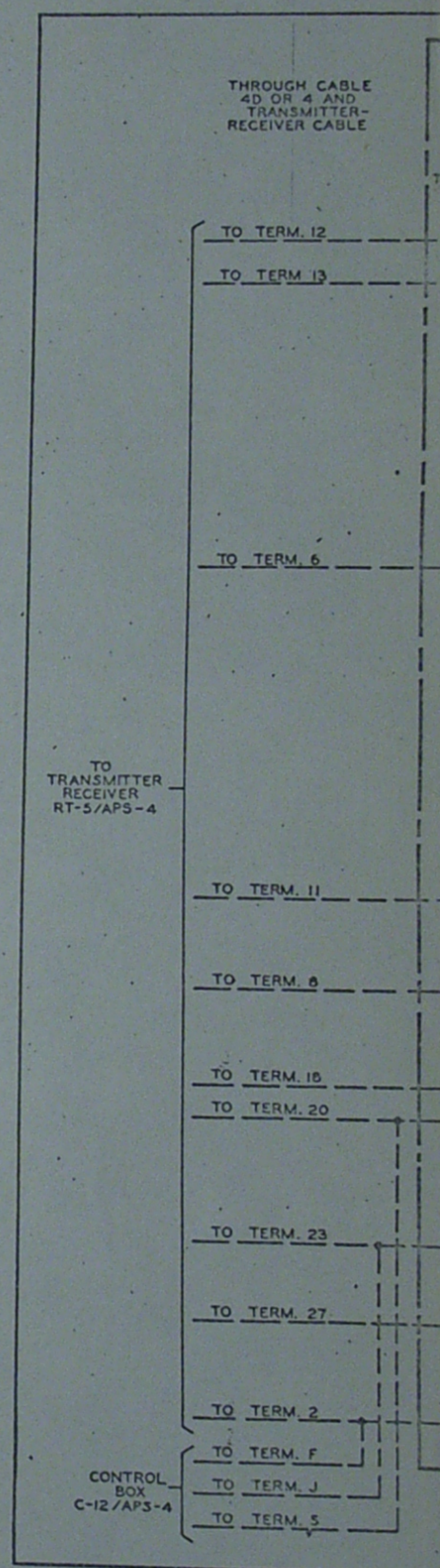
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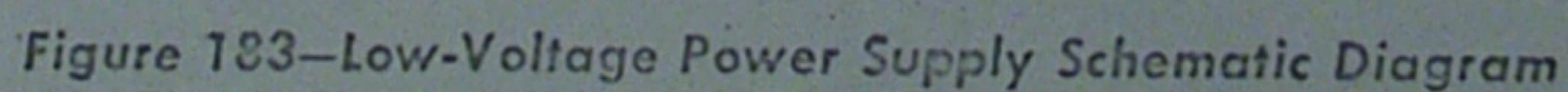
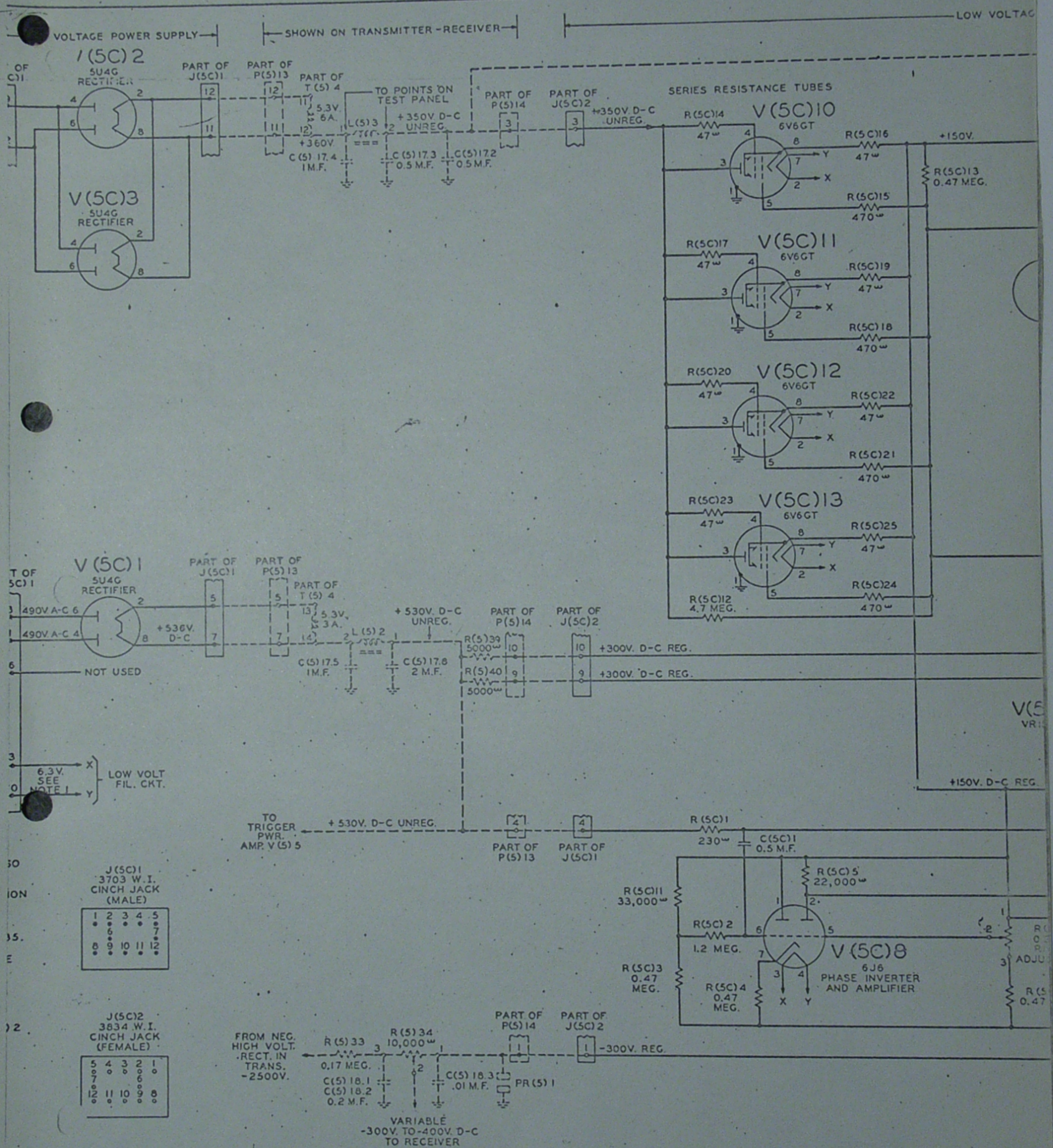


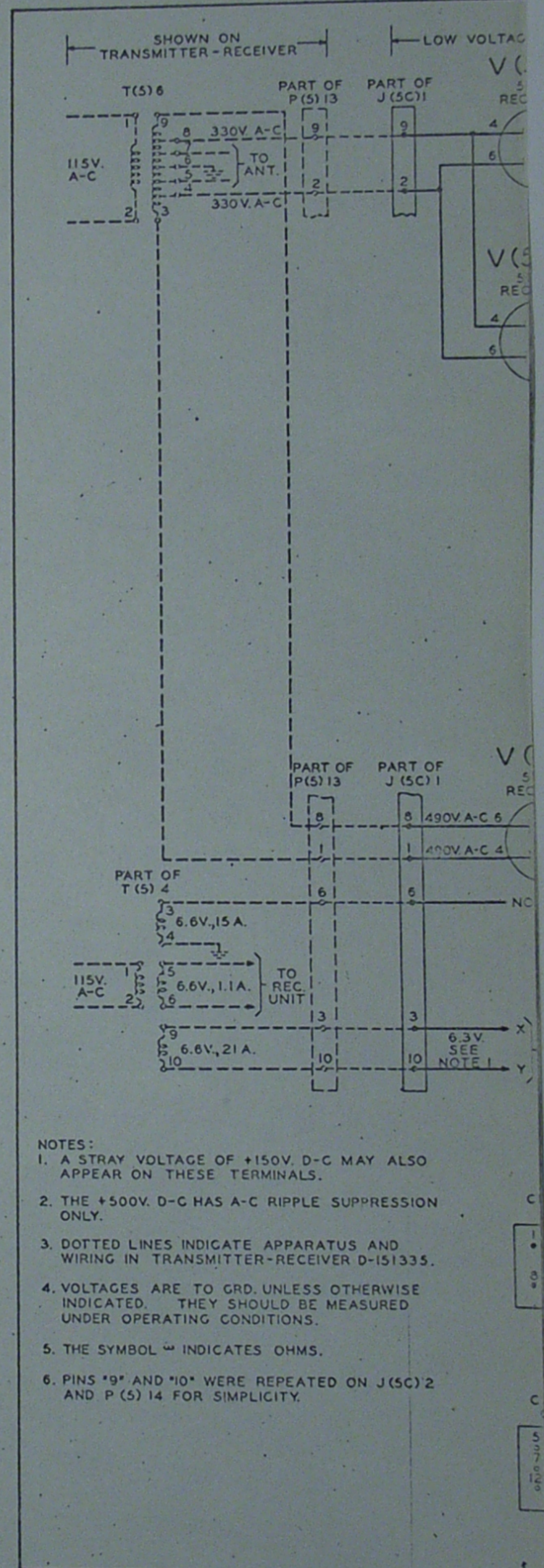
Fig. 183

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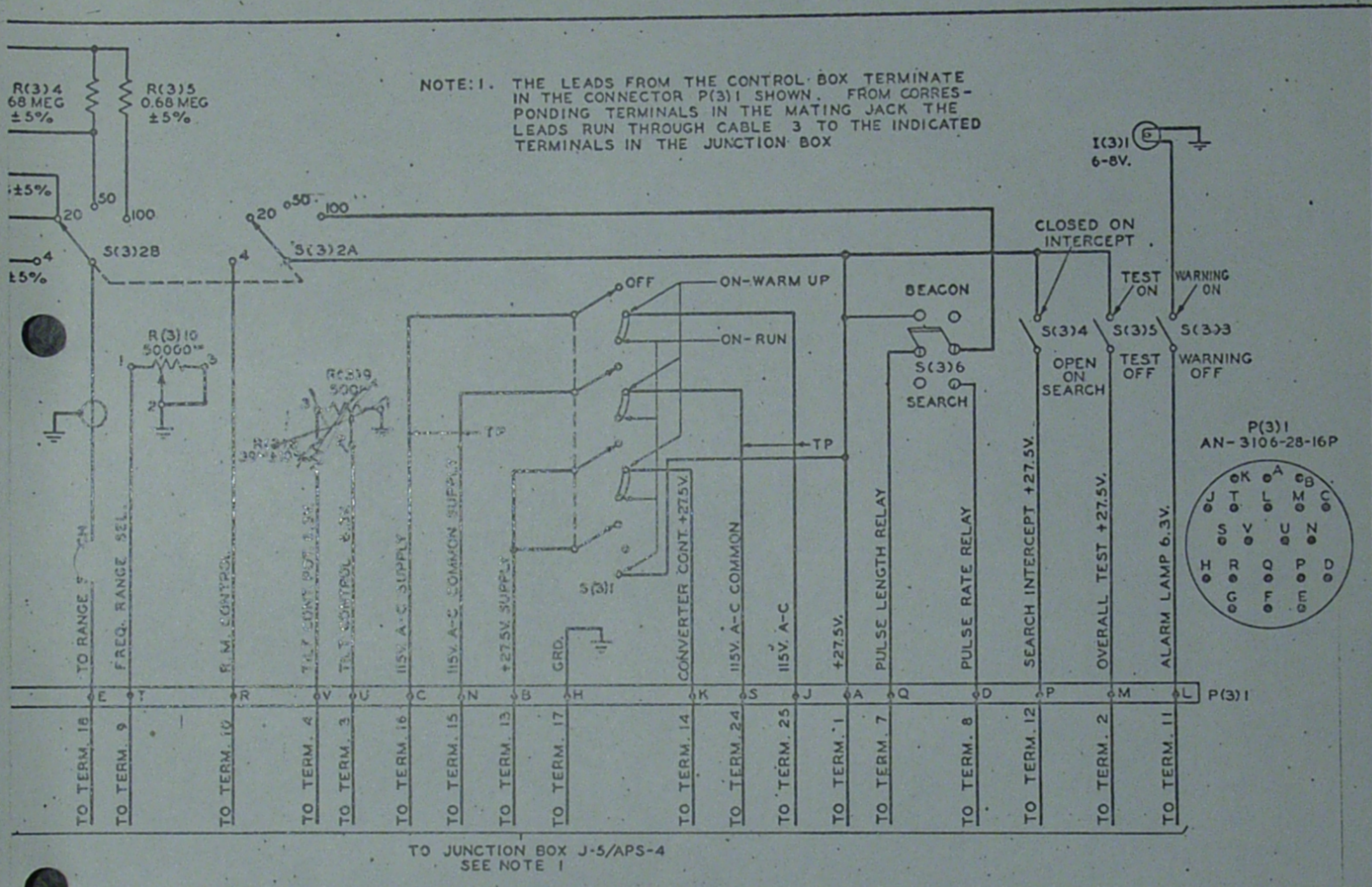


Figure 185—Control Box C-12/APS-4; Schematic Diagram

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Fig. 185

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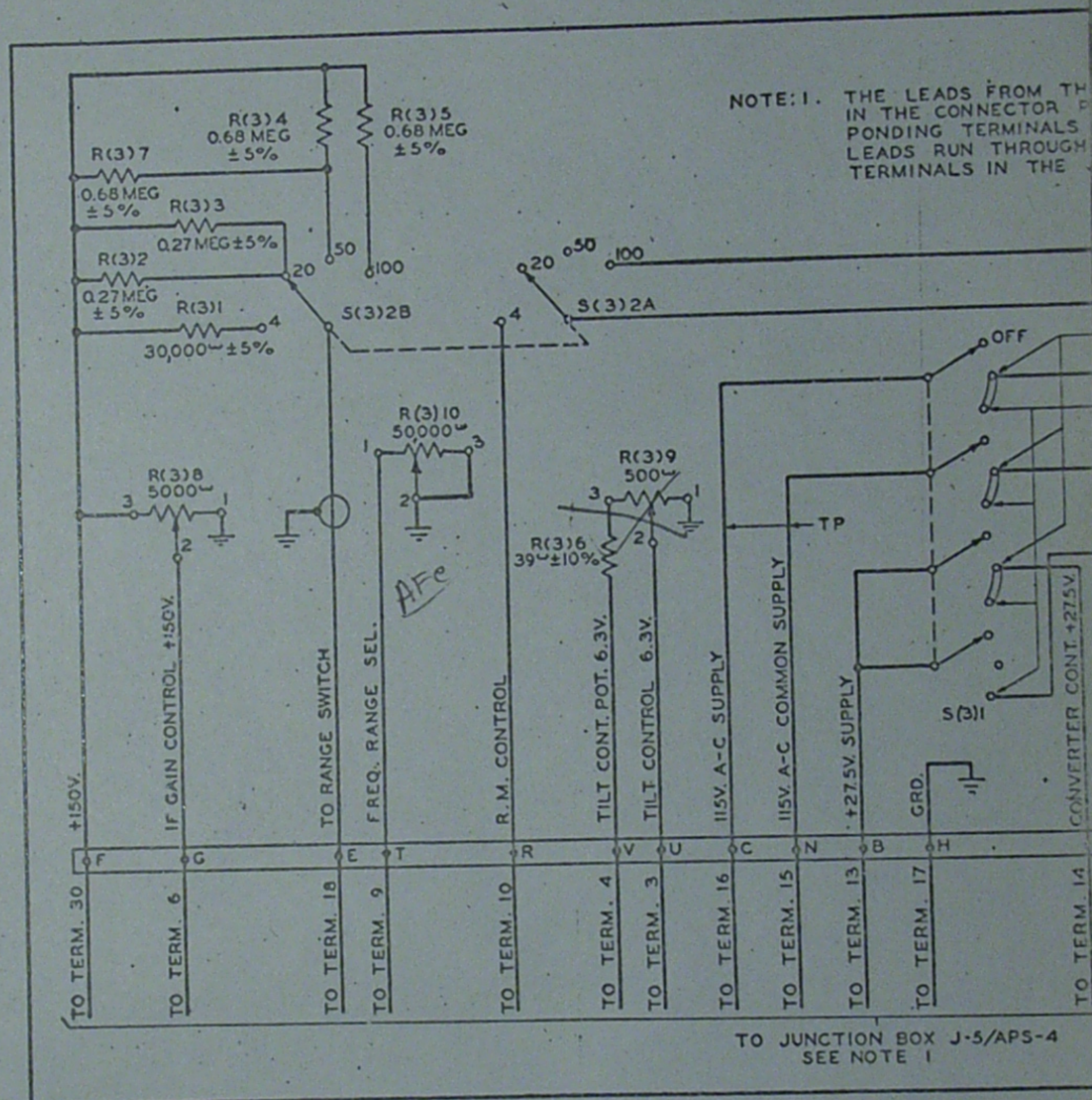


Figure 185-Co

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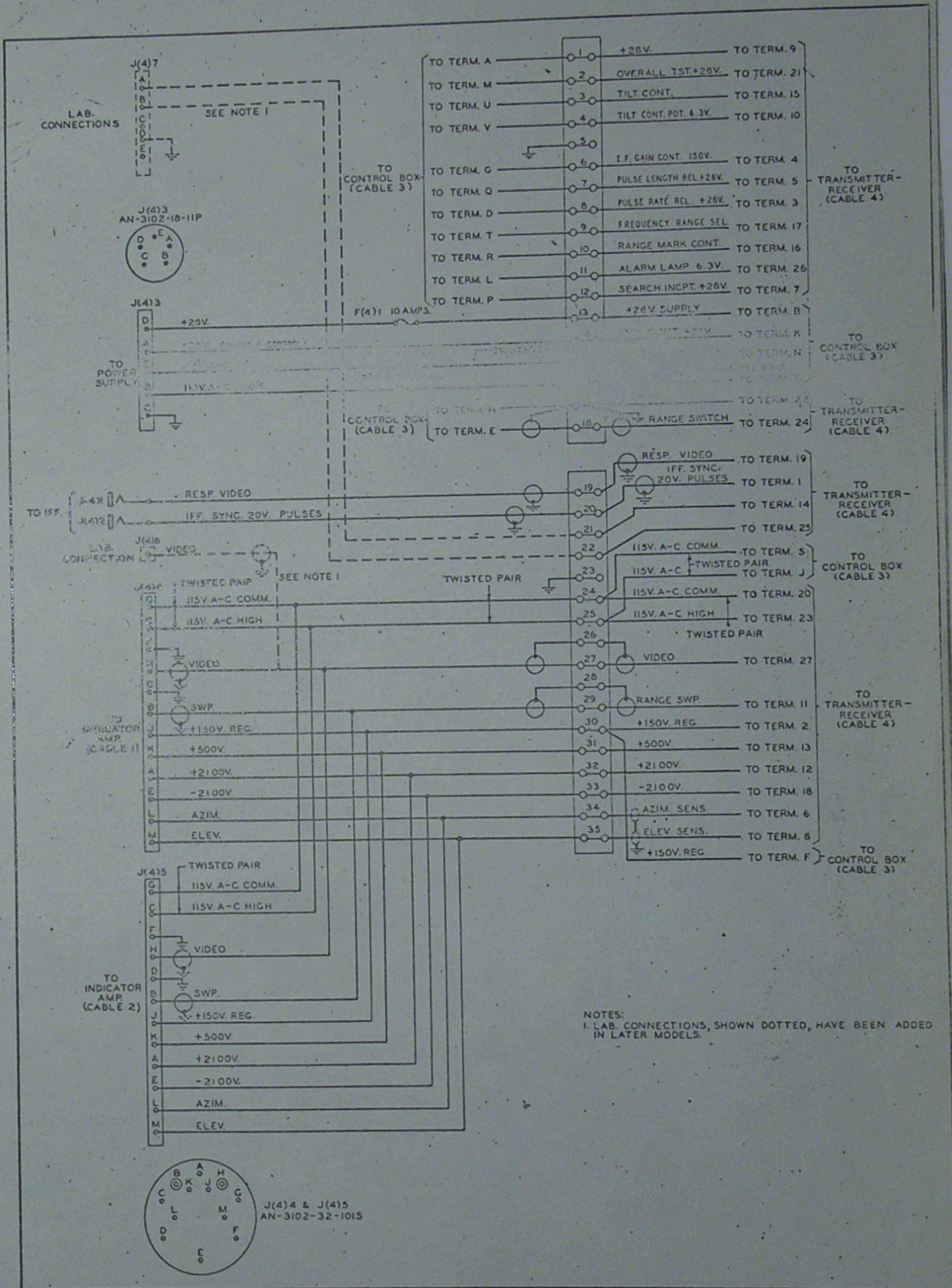


Figure 187—Junction Box J-5/APS-4; Schematic Diagram

Fig. 187

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